

**SEARCH REQUEST FORM****Scientific and Technical Information Center**

Requester's Full Name: Bethlehem Shewareged Examiner #: 75633 Date: 01/30/2007  
 Art Unit: 1774 Phone Number: 2-1529 Serial Number: 101806, 618  
 Mail Box and Bldg/Room Location: REM 10A65 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Interior Ornament & Indicator Panel for Vehicle

Inventors (please provide full names): Tetsuto Miyazaki ; Tetsuji Ohta

Earliest Priority Filing Date: 03/26/2003

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

① Ink-acceptance layer comprising 5-benzotriazole carboxylate

② Ink-acceptance layer comprising benzotriazole-5-carboxylate

③ Ink-acceptance layer comprising  
 1-alkyloylbenzotriazole where a carbon number of  
 alkyloyl group is from 8 to 24.

④ Ink-acceptance layer comprising  
 1-alkenoylbenzotriazole where a carbon number of  
 alkenoyl group is from 8 to 24, ~~and~~

⑤ Ink-acceptance layer comprising  
 benzotriazole series compounds having a  
 constitutional unit of polyalkylene glycol; ~~and~~

SCIENTIFIC REFERENCE BR  
 Sci & Tech Ref. Ctr  
 JAN 30 REC'D  
 Pat. & TM Office

**STAFF USE ONLY****Type of Search****Vendors and cost where applicable**

Searcher: <u>EL</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
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Date Completed: <u>2-2-07</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

What is claimed is:

1. An interior ornament for a vehicle comprising:  
a base substrate;

an ink-acceptance layer coated on at least one surface of  
5 the base substrate, the ink-acceptance layer including  
from 7 weight % to 15 weight % of one or more benzotriazole  
series compounds,

wherein the benzotriazole series compounds are selected from  
the group of,

10 phenyl-5-benzotriazole carboxylate,  
methyl-5-benzotriazole carboxylate,  
phenyl-1-(4-hydroxy-3-[N-(2-tetradecyloxyphenyl)  
carbamoyl]-1-naphthyloxymethyl)-1H-  
benzotriazole-5-carboxylate,  
15 phenyl-1-(4-hydroxy-3-[N-(2-tetradecyloxyphenyl)  
carbamoyl]-1-naphthyloxymethyl)-1H-  
benzotriazole-6-carboxylate,

5-benzotriazole carboxylate,

benzotriazole-5-carboxylate,

20 1-alkyloylbenzotriazole where a carbon number of  
alkyloyl group is from 8 to 24,

1-alkenoylbenzotriazole where a carbon number of  
alkenoyl group is from 8 to 24, and

25 benzotriazole series compounds having a  
constitutional unit of polyalkylene glycol; and

a printed layer printed on the ink-acceptance layer.

2. The interior ornament of claim 1, wherein:

a content of the benzotriazole series compounds to the  
ink-acceptance layer is from 9 weight % to 13 weight %.

3. The interior ornament of claim 1, wherein:

the printed layer is printed by an ink-jet printing method.

5 4. An indicator panel for a vehicle comprising:

a base substrate having transparency;

an ink-acceptance layer coated on at least one surface of

the base substrate, the ink-acceptance layer including

from 7 weight % to 15 weight % of one or more benzotriazole

10 series compounds,

wherein the benzotriazole series compounds are selected from  
the group of,

phenyl-5-benzotriazole carboxylate,

methyl-5-benzotriazole carboxylate,

15 phenyl-1-{4-hydroxy-3-[N-(2-tetradecyloxyphenyl)  
carbamoyl]-1-naphthyloxymethyl}-1H-

benzotriazole-5-carboxylate,

phenyl-1-{4-hydroxy-3-[N-(2-tetradecyloxyphenyl)  
carbamoyl]-1-naphthyloxymethyl}-1H-

20 benzotriazole-6-carboxylate,

5-benzotriazole carboxylate,

benzotriazole-5-carboxylate,

1-alkyloylbenzotriazole where a carbon number of  
alkyloyl group is from 8 to 24,

25 1-alkenoylbenzotriazole where a carbon number of  
alkenoyl group is from 8 to 24, and

benzotriazole series compounds having a

constitutional unit of polyalkylene glycol; and  
a printed layer printed on the ink-acceptance layer.

5. The indicator panel of claim 4, wherein:

a content of the benzotriazole series compounds to the

5 ink-acceptance layer is from 9 weight % to 13 weight %.

6. The indicator panel of claim 4, wherein:

the printed layer is printed by an ink-jet printing method.



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Bib Data Sheet

CONFIRMATION NO. 2620

<b>SERIAL NUMBER</b> 10/806,618	<b>FILING OR 371(c) DATE</b> 03/23/2004 <b>RULE</b>	<b>CLASS</b> 428	<b>GROUP ART UNIT</b> 1774	<b>ATTORNEY DOCKET NO.</b> 44471/298746
<b>APPLICANTS</b> Tetsuto Miyanishi, Kitakatsushika-gun, JAPAN; Tetsuji Ohta, Saitama-shi, JAPAN; <b>** CONTINUING DATA *****</b> <b>** FOREIGN APPLICATIONS *****</b> JAPAN P2003-085438 03/26/2003 <b>IF REQUIRED, FOREIGN FILING LICENSE GRANTED</b> <b>** 06/10/2004</b>				
Foreign Priority claimed <input type="checkbox"/> yes <input type="checkbox"/> no 35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after met Allowance Verified and Acknowledged _____ Examiner's Signature Initials		<b>STATE OR COUNTRY</b> JAPAN	<b>SHEETS DRAWING</b> 3	<b>TOTAL CLAIMS</b> 6
			<b>INDEPENDENT CLAIMS</b> 2	
<b>ADDRESS</b> 23370				
<b>TITLE</b> Interior ornament and indicator panel for vehicle				
<b>FILING FEE RECEIVED</b> 900	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees ( Filing ) <input type="checkbox"/> 1.17 Fees ( Processing Ext. of time ) <input type="checkbox"/> 1.18 Fees ( Issue ) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit	

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FILE 'REGISTRY' ENTERED AT 12:06:11 ON 02 FEB 2007  
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FILE 'LREGISTRY' ENTERED AT 11:22:13 ON 02 FEB 2007

L1 STR  
E C7H5N3O2  
L2 12 S E3

FILE 'REGISTRY' ENTERED AT 11:31:23 ON 02 FEB 2007

E C7H5N3O2  
L3 403 S E3  
L4 66 S L3 AND ?CARBOXYL?/CNS  
E 1H-BENZOTRIAZOLECARBOXYLIC ACID/CN  
L5 1 S E3  
E 1H-BENZOTRIAZOLE-5-CARBOXYLIC ACID/CN  
L6 1 S E3

FILE 'HCA' ENTERED AT 11:35:17 ON 02 FEB 2007

L7 109 S L5  
L8 214 S L6  
L9 84149 S INK?  
L10 24295 S JET?(2A)PRINT?  
L11 6 S L7 AND (L9 OR L10)  
L12 4 S L8 AND (L9 OR L10)  
L13 186569 S AUTOMOTIV? OR AUTOMOB? OR VEHICUL? OR VEHICLE? OR (DASH  
L14 682 S INK?(2A)ACCEPT?  
L15 2 S L7 AND (L13 OR L14)  
L16 2 S L8 AND (L13 OR L14)

FILE 'REGISTRY' ENTERED AT 11:42:30 ON 02 FEB 2007

L17 1 S L1  
L18 73 S L1 FUL  
SAV L18 SHE618A/A

FILE 'HCA' ENTERED AT 11:51:23 ON 02 FEB 2007

L19 64 S L18  
L20 0 S L19 AND (L9 OR L10 OR L13 OR L14)

FILE 'REGISTRY' ENTERED AT 11:56:28 ON 02 FEB 2007

L21 147493 S C2H4O OR C3H6O  
E POLYETHER/PCT

L22 281188 S E3

FILE 'LREGISTRY' ENTERED AT 11:56:55 ON 02 FEB 2007  
E BENZOTRIAZOLE/CN

L23 1 S E5

FILE 'REGISTRY' ENTERED AT 11:58:32 ON 02 FEB 2007

L24 3024 S 333.415.18/RID

L25 11 S L24 AND L22

L26 8 S L24 AND L21

FILE 'HCA' ENTERED AT 12:00:10 ON 02 FEB 2007

L27 9 S L25 OR L26

L28 0 S L27 AND (L9 OR L10 OR L13 OR L14)

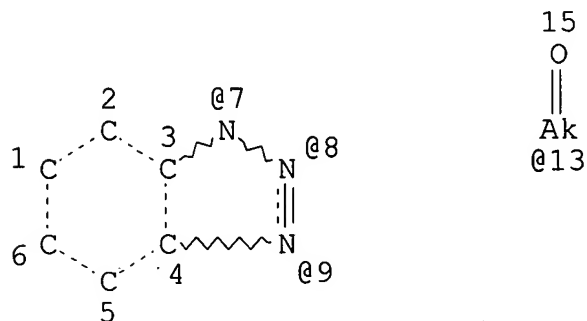
L29 14 S L11 OR L12 OR L15 OR L16

L30 9 S L27 NOT L29

L31 64 S L19 NOT (L29 OR L30)

FILE 'REGISTRY' ENTERED AT 12:06:11 ON 02 FEB 2007

=> D L18 QUE STAT  
L1 STR



VPA 13-9/8/7 U

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 13

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS M6 C AT 13

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L18 73 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 65570 ITERATIONS  
SEARCH TIME: 00.00.01

73 ANSWERS

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=&gt; D L29 1-14 CBIB ABS HITSTR HITIND

L29 ANSWER 1 OF 14 HCA COPYRIGHT 2007 ACS on STN

145:507283 Water-based **ink** for **ink**-jet recording.

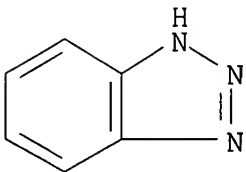
Okuda, Satoshi; Koga, Narumi; Goto, Kazuma; Ohira, Hideo; Sugimoto, Junichiro; Fujioka, Masaya; Higashiyama, Shunichi (Brother Kogyo Kabushiki Kaisha, Japan). U.S. Pat. Appl. Publ. US 2006260506 A1 20061123, 6pp. (English). CODEN: USXXCO. APPLICATION: US 2006-435845 20060518. PRIORITY: JP 2005-147756 20050520.

AB A water-based **ink** for **ink**-jet recording includes a reactive dye which forms chloride ions in the **ink**, benzotriazole, carboxybenzotriazole, water, and a water-sol. org. solvent. Examples of the reactive dye which forms chloride ions in the **ink** include triazine-based reactive dyes and the like.

IT **60932-58-3**, Carboxybenzotriazole  
(water-based **ink** for **ink**-jet recording)

RN 60932-58-3 HCA

CN 1H-Benzotriazolecarboxylic acid (9CI) (CA INDEX NAME)

D1-CO<sub>2</sub>H

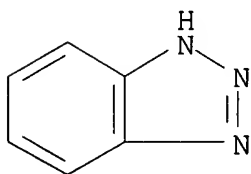
INCL 106031130

CC 42-12 (Coatings, Inks, and Related Products)

ST reactive dye benzotriazole carboxybenzotriazole water **ink**  
jet recording



- IT **Inks**  
(**jet-printing**; water-based **ink** for **ink-jet** recording)
- IT **Ink-jet printing**  
(water-based **ink** for **ink-jet** recording)
- IT 7440-02-0, Nickel, uses  
(**ink-jet** head; water-based **ink** for **ink-jet** recording)
- IT 56-81-5, Glycerin, uses 95-14-7, 1H-Benzotriazole 7732-18-5,  
Water, uses 9004-82-4, SUNNOL DL-1430 12237-00-2, C.I. Reactive  
Red 31 29911-27-1, Dipropylene glycol propyl ether  
**60932-58-3**, Carboxybenzotriazole  
(water-based **ink** for **ink-jet** recording)
- L29 ANSWER 2 OF 14 HCA COPYRIGHT 2007 ACS on STN
- 142:230209 Formation of electrically conductive patterns in manufacture  
of printed circuit boards. Sotomura, Shoichiro (Asahi Kasei  
Electronics Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2005051179  
A 20050224, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP  
2003-284319 20030731.
- AB The process includes steps of: (a) forming resist patterns using  
photo-sensitive **inks**, (b) plating metals where the resist  
patterns are absent, and (c) removal of the resist patterns,  
creating elec. conductive patterns.
- IT **60932-58-3**, Carboxybenzotriazole  
(photo-sensitive **inks**; formation of elec. conductive  
patterns using photo-sensitive **inks** in manuf. of  
printed circuit boards)
- RN 60932-58-3 HCA
- CN 1H-Benzotriazolecarboxylic acid (9CI) (CA INDEX NAME)



D1-CO<sub>2</sub>H

- IC ICM H05K003-18
- CC 76-2 (Electric Phenomena)
- ST elec conductive pattern printed circuit board; resist pattern photo  
sensitive **ink**
- IT Photolithography  
Printed circuit boards

- (formation of elec. conductive patterns using photo-sensitive **inks** in manuf. of printed circuit boards)
- IT Photoresists  
(**inks**; formation of elec. conductive patterns using photo-sensitive **inks** in manuf. of printed circuit boards)
- IT **Inks**  
(photo-sensitive; formation of elec. conductive patterns using photo-sensitive **inks** in manuf. of printed circuit boards)
- IT 70-55-3, P-Toluene sulfonamide 90-93-7 548-62-9, Crystal violet 569-64-2, Malachite green 6143-80-2 25035-69-2, Methyl methacrylate-methacrylic acid-butyl acrylate copolymer 25035-81-8, Methyl methacrylate-methacrylic acid-styrene copolymer 25852-49-7, Polypropylene glycol dimethacrylate 28961-43-5, NK ester A-TMPT-3EO 30697-40-6 56744-60-6, NK ester BPE 200 **60932-58-3**, Carboxybenzotriazole 72270-11-2 400051-26-5  
(photo-sensitive **inks**; formation of elec. conductive patterns using photo-sensitive **inks** in manuf. of printed circuit boards)
- IT 868-77-9, Glycol methacrylate  
(propylene-oxide-contg. photo-sensitive **inks**; formation of elec. conductive patterns using photo-sensitive **inks** in manuf. of printed circuit boards)
- IT 39420-45-6, Blemmer PP 1000  
(reaction products with hexamethylene diisocyanate, photo-sensitive **inks**; formation of elec. conductive patterns using photo-sensitive **inks** in manuf. of printed circuit boards)
- IT 822-06-0, Hexamethylene diisocyanate  
(reaction products with oligo-propylene glycol mono-methacrylate, photo-sensitive **inks**; formation of elec. conductive patterns using photo-sensitive **inks** in manuf. of printed circuit boards)
- L29 ANSWER 3 OF 14 HCA COPYRIGHT 2007 ACS on STN
- 142:8068 Anticorrosive agent for light metals alloys and use thereof.. Wilken, Ralph; Dieckhoff, Stefan; Seiler, Andreas; Hartwig, Andreas; Kowalik, Thomas (Fraunhofer-Gesellschaft zur Foerderung der Angewandten Forschung e.V., Germany). PCT Int. Appl. WO 2004101692 A1 20041125, 22 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE,

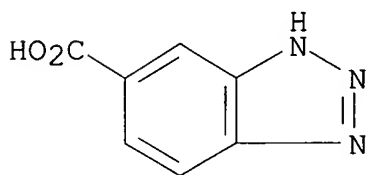
SN, TD, TG, TR. (German). CODEN: PIXXD2. APPLICATION: WO 2004-EP5435 20040519. PRIORITY: DE 2003-10322507 20030519.

AB An anticorrosive agent for Cu-, Fe-, Co- and Ni-contg. light metals alloys consists of a salt of org. base and org. acid (the salt is linked with a polymer and/or admixed to a polymer) and is used in coatings, adhesives, paints and primers in **automobile** and aircraft industry. Thus, surfaces of Al- and Mg-alloys (AA2024, AZ31B and AM50) does not exhibit any corrosion after keeping 14 days in 3% aq. soln. of NaCl in the presence of 0.1% a salt of 1H-benzotriazole and N-methylmorpholine.

IT **23814-12-2, 5-Carboxybenzotriazole**  
(org. base; anticorrosive agent for Cu-, Fe-, Co- and Ni-contg. light metals alloys consisting of a salt of org. base and org. acid optionally linked to a polymer)

RN 23814-12-2 HCA

CN 1H-Benzotriazole-5-carboxylic acid (8CI, 9CI) (CA INDEX NAME)



IC ICM C09D005-08  
ICS C23F011-14

CC 42-10 (Coatings, Inks, and Related Products)

IT **Automobiles**

(anticorrosive agent for Cu-, Fe-, Co- and Ni-contg. light metals alloys used in cars consisting of a salt of org. base and org. acid optionally linked to a polymer)

IT 96-20-8D, ethers 100-74-3, 4-Ethylmorpholine 102-71-6, Triethanolamine, reactions 109-02-4, N-Methylmorpholine 110-91-8D, Morpholine, derivs. 136-85-6, 5-Methylbenzotriazole 141-43-5D, Aminoethanol, ethers, reactions 156-87-6D, 3-Aminopropanol, ethers 288-88-0, 1H-1,2,4-Triazole 2867-59-6D, 3-Aminobutanol, ethers 6168-72-5D, 2-Aminopropanol, ethers **23814-12-2, 5-Carboxybenzotriazole**

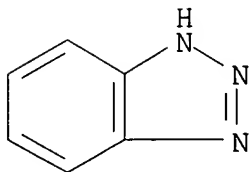
(org. base; anticorrosive agent for Cu-, Fe-, Co- and Ni-contg. light metals alloys consisting of a salt of org. base and org. acid optionally linked to a polymer)

L29 ANSWER 4 OF 14 HCA COPYRIGHT 2007 ACS on STN

140:81260 Mold remediation system and method. Hobson, David W.; Helton, Danny O.; Seal, Lawton A. (Dh Technologies, L.L.P., USA). U.S. Pat. Appl. Publ. US 2004001777 A1 20040101, 12 pp. (English). CODEN: USXXCO. APPLICATION: US 2002-302696 20021125. PRIORITY: US 2002-370323P 20020405.

AB Provided herein are systems and methods assocd. therewith for killing molds and reducing other contaminating bioburden that may include bacteria and their spores, yeast, and viruses within various dwellings including homes, office buildings, institutions, and any other enclosed space in which humans reside, either temporarily or permanently. The technol. of the invention can be used to treat **vehicles**, airplanes, and ships. A process according to the invention includes the generation of a gaseous oxyhalogen species and distribution of the gaseous oxyhalogen species throughout a selected dwelling. It has been unexpectedly found that the concn. level of gaseous oxyhalogen species necessary to kill molds according to the inventive methods is far below that previously recognized in the art as being necessary for the killing of such molds. Thus, mold infestations may be killed in dwellings with minimal disruption to the usual business of the inhabitants. Further, fabrics such as drapes and upholsteries contained within such dwellings may be carried out without causing any detrimental color changes to the fabrics.

IT **60932-58-3**, Carboxybenzotriazole  
(corrosion inhibitor; mold remediation system and method)  
RN 60932-58-3 HCA  
CN 1H-Benzotriazolecarboxylic acid (9CI) (CA INDEX NAME)



D1-CO<sub>2</sub>H

IC ICM A61L009-00  
ICS C23F011-00  
INCL 422037000; X42-2 3.3; X42-2 .4; X42-2 .7  
CC 59-6 (Air Pollution and Industrial Hygiene)  
Section cross-reference(s): 40  
ST compn remediation mold hypochlorous acid building **vehicle**  
fabric  
IT 108-01-0, N,N-Dimethylethanolamine 110-91-8, Morpholine, uses  
149-30-4, 2-Mercaptobenzothiazole 1072-71-5, 2,5-Dimercapto-1,3,4-  
thiadiazole 7664-38-2D, Phosphoric acid, dialkali metal salts  
29385-43-1, Tolyltriazole **60932-58-3**, Carboxybenzotriazole  
64665-53-8, 1H-Benzotriazole, C-methyl-, potassium salt  
64665-57-2, Sodium tolyltriazole  
(corrosion inhibitor; mold remediation system and method)

L29 ANSWER 5 OF 14 HCA COPYRIGHT 2007 ACS on STN

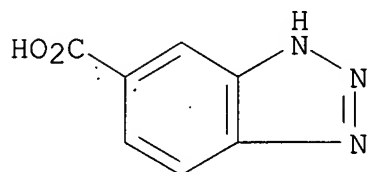
136:311380 Aqueous **ink** compositions with good in quick-drying property and mild for earth environment. Takao, Nagayuki; Furutani, Takahiro (Japan). U.S. Pat. Appl. Publ. US 2002045679 A1 20020418, 8 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-924679 20010809. PRIORITY: JP 2000-244428 20000811.

AB The compn. having good drying characteristics for impermeable printing materials such as plastic films without using apparatuses such as UV irradsn. apparatuses and heating apparatuses and mild for earth environment, comprises water, a water-sol. solvent (e.g., ethanol), a water-sol. resin [e.g., polyvinylpyrrolidone (K 30)] and a dye (e.g., europium-thenoyltrifluoroacetone complex), and, addnl., a quick-drying property imparting agent (e.g., 1,2,3-benzotriazole) having a soly. in the water lower than that in the water-sol. solvent.

IT **23814-12-2**, Benzotriazole-5-carboxylic acid  
(quick-drying property imparting agent; aq. **ink** compns.  
with good in quick-drying property and mild for earth  
environment)

RN 23814-12-2 HCA

CN 1H-Benzotriazole-5-carboxylic acid (8CI, 9CI) (CA INDEX NAME)



IC ICM C09D005-00

INCL 523161000

CC 42-12 (Coatings, Inks, and Related Products)

ST polyvinylpyrrolidone benzotriazole **ink** aq quick drying

IT Alcohols, uses

(C1-3; aq. **ink** compns. with good in quick-drying  
property and mild for earth environment)

IT Ethers, uses

Ketones, uses

(aq. **ink** compns. with good in quick-drying property and  
mild for earth environment)

IT Polyethers, uses

(aq. **ink** compns. with good in quick-drying property and  
mild for earth environment)

IT Polyurethanes, uses

(aq. **ink** compns. with good in quick-drying property and  
mild for earth environment)

IT Polymers, uses

(water-sol.; aq. **ink** compns. with good in quick-drying property and mild for earth environment)

IT **Inks**

(water-thinned; aq. **ink** compns. with good in quick-drying property and mild for earth environment)

IT 64-17-5, Ethanol, uses 71-23-8, Propanol, uses

(aq. **ink** compns. with good in quick-drying property and mild for earth environment)

IT 9002-89-5, Polyvinyl alcohol 9003-01-4, Polyacrylic acid  
9003-39-8, Polyvinylpyrrolidone

(aq. **ink** compns. with good in quick-drying property and mild for earth environment)

IT 59-49-4, 2-Benzoxazolinone 95-14-7, 1,2,3-Benzotriazole  
273-53-0, Benzoxazole 288-42-6D, Oxazole, derivs. 2382-96-9,  
2-Mercaptobenzoxazole 18378-20-6 **23814-12-2**,  
Benzotriazole-5-carboxylic acid 28539-02-8, 1H-Benzotriazole-1-  
methanol 37306-44-8D, Triazole, derivs. 87022-36-4,  
N-(1H-Benzotriazol-1-ylmethyl)formamide

(quick-drying property imparting agent; aq. **ink** compns.  
with good in quick-drying property and mild for earth  
environment)

L29 ANSWER 6 OF 14 HCA COPYRIGHT 2007 ACS on STN

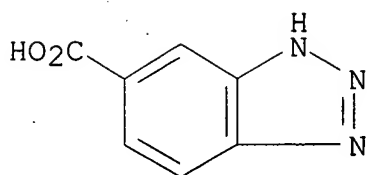
134:273574 **Ink**-jet recording materials for formation of  
low-glitter printings with aqueous **inks**. Ota, Satoshi  
(Kimoto and Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001088430  
A 20010403, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP  
1999-268549 19990922.

AB The materials comprise **ink** receptor layers contg.  
water-sol. or hydrophilic polymers and  $\geq 1$  benzotriazoles  
selected from (a) Ph 5-benzotriazolecarboxylate, (b) Me  
5-benzotriazolecarboxylate, (c) Ph 1-[4-hydroxy-3-[N-(2-  
tetradecyloxyphenyl)carbamoyl]-1-naphthyloxymethyl]-1H-benzotriazole-  
5-carboxylate, (d) Ph 1-[4-hydroxy-3-[N-(2-tetradecyloxyphenyl)  
carbamoyl]-1-naphthyloxymethyl]-1H-benzotriazole-6-carboxylate, (e)  
5-benzotriazolecarboxylic acid (sic), (f) benzotriazole-5-carboxylic  
acid (sic), (g) 1-C8-24 alkyloylbenzotriazoles, and (h) 1-C8-24  
alkenoylbenzotriazoles. Images formed on the sheets are resistant  
to light.

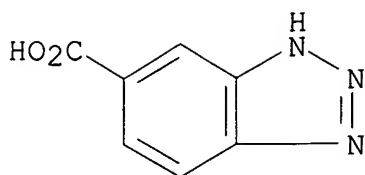
IT **23814-12-2**, 5-Benzotriazole carboxylic acid  
(**ink**-jet recording sheets with receptor layers contg.  
benzotriazole derivs. for formation of light-resistant low  
glitter printings with aq. **inks**)

RN 23814-12-2 HCA

CN 1H-Benzotriazole-5-carboxylic acid (8CI, 9CI) (CA INDEX NAME)



- IC ICM B41M005-00
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST glitter low image aq **ink** printing; **ink** jet printing sheet low glitter; benzotriazole receptor layer additive **ink** jet sheet
- IT **Ink**-jet recording sheets  
 (**ink**-jet recording sheets with receptor layers contg. benzotriazole derivs. for formation of light-resistant low glitter printings with aq. **inks**)
- IT 95-14-7D, 1H-Benzotriazole, 1-C8-24alkyloyl or 1-C8-24alkenoyl derivs. **23814-12-2**, 5-Benzotriazole carboxylic acid  
 84902-17-0 107091-96-3 113053-50-2, Methyl 5-benzotriazole carboxylate 140130-48-9  
 (**ink**-jet recording sheets with receptor layers contg. benzotriazole derivs. for formation of light-resistant low glitter printings with aq. **inks**)
- L29 ANSWER 7 OF 14 HCA COPYRIGHT 2007 ACS on STN  
 133:179071 Phase-change **inks**. Breton, Marcel P.; Malhotra, Shadi L.; Wong, Raymond W. (Xerox Corp., USA). U.S. US 6106599 A 20000822, 13 pp. (English). CODEN: USXXAM. APPLICATION: US 1999-342392 19990629.
- AB An **ink** compn. comprises (1) an azole compd., (2) a viscosity compd., (3) a lightfastness component, (4) an antioxidant, and (5) a colorant. A black phase-change **ink** contained pyrazole, 2-acetyl pyrrole (viscosity modifier), 2-(2H-benzotriazol-2-yl)-4,6-di-tert-pentyl phenol (UV absorber), sodium-N-(1,2-dicarboxyethyl)-N-octadecyl sulfosuccinamate (antioxidant), and Neozapon Black X51.
- IT **23814-12-2**, Benzotriazole-5-carboxylic acid  
 (phase-change **inks**)
- RN 23814-12-2 HCA
- CN 1H-Benzotriazole-5-carboxylic acid (8CI, 9CI) (CA INDEX NAME)



IC ICM C09D011-00  
 INCL 106031290  
 CC 42-12 (Coatings, Inks, and Related Products)  
 ST phase change **ink** azole compd  
 IT Antioxidants  
 Light stabilizers  
 (phase-change **inks**)  
 IT **Inks**  
 (phase-change; phase-change **inks**)  
 IT 594-07-0D, Dithiocarbamic acid, molybdenum oxysulfide complex  
 7439-98-7D, Molybdenum, dithiocarbamate oxysulfide complex, uses  
 30947-30-9 37767-39-8, Tetrasodium N-(1,2-dicarboxyethyl)-N-octadecyl sulfosuccinamate 38916-42-6, Aerosol 22N  
 (antioxidant; phase-change **inks**)  
 IT 4314-14-1, Sudan Yellow 146 6368-72-5, Sudan Red 462 12237-22-8,  
 Neozapon Black X51 17354-14-2, Sudan Blue 670  
 (colorant; phase-change **inks**)  
 IT 3147-75-9 10041-06-2 25973-55-1, 2-(2H-Benzotriazol-2-yl)-4,6-di-  
 tert-pentylphenol 96478-09-0  
 (lightfastness agent; phase-change **inks**)  
 IT 54-95-5, 1,5-Pentamethylene tetrazole 67-51-6,  
 3,5-Dimethylpyrazole 95-14-7, 1H-Benzotriazole 136-85-6,  
 5-Methyl-1H-benzotriazole 288-13-1, Pyrazole 288-88-0,  
 1H-1,2,4-Triazole 530-62-1, 1,1'-Carbonyl diimidazole 584-13-4,  
 4-Amino-1,2,4-triazole 1572-10-7, 3-Amino-5-phenyl pyrazole  
 1614-12-6, 1-Amino benzotriazole 2075-45-8, 4-Bromo pyrazole  
 3398-16-1, 4-Bromo-3,5-dimethyl pyrazole 6160-65-2,  
 1,1'-Thiocarbonyl diimidazole 6994-25-8, Ethyl 3-amino-4-pyrazole  
 carboxylate 7119-95-1, 1-Nitropyrazole 7189-69-7, 1,1'-Sulfonyl  
 diimidazole 13183-79-4, 5-Mercapto-1-methyltetrazole 13808-64-5,  
 4-Bromo-3-methylpyrazole 14704-41-7, 3,5-  
 Bis(trifluoromethyl)pyrazole 16078-71-0 16731-68-3, 2-Undecyl  
 imidazole **23814-12-2**, Benzotriazole-5-carboxylic acid  
 28791-86-8 28791-87-9 33306-77-3 37622-90-5, Ethyl  
 4-pyrazolecarboxylate 70938-42-0, 1H-Benzotriazole-5-  
 carboxaldehyde 71878-80-3 76674-99-2 93429-29-9 124316-00-3  
 (phase-change **inks**)  
 IT 59-98-3, 2-Benzyl-2-imidazoline 87-52-5, [3-(Dimethylamino methyl)  
 indole] 96-50-4, 2-Aminothiazole 136-95-8, 2-Amino benzothiazole  
 534-26-9, 2-Methyl-2-imidazoline 936-49-2, 2-Phenyl-2-imidazoline



1072-83-9, 2-Acetyl pyrrole 1075-35-0, 5-Chloro-2-methylindole  
 1076-74-0, 5-Methoxy-2-methyl indole 3389-21-7,  
 3-(2-Bromoethyl)indole 5391-40-2, 1,3-Diacetyl-2-imidazolidinone  
 6025-60-1, 1-(2-Aminophenyl)pyrrole 7144-49-2, 2-(Methylsulfonyl)  
 benzothiazole 7305-71-7, 2-Amino-5-methylthiazole 10045-45-1  
 10075-50-0, 5-Bromoindole 16200-50-3 16851-82-4,  
 1-(Phenylsulfonyl)pyrrole 20303-31-5 27323-28-0, Methylindole  
 40899-71-6, 1-(Phenylsulfonyl)indole 53266-94-7, Ethyl  
 2-amino-4-thiazole acetate 64415-14-1 64987-05-9 73955-61-0  
 80756-85-0, S-2-Benzothiazolyl 2-amino- $\alpha$ -(methoxyimino)-4-  
 thiazolethioacetate 288576-57-8  
 (viscosity modifier; phase-change **inks**)

L29 ANSWER 8 OF 14 HCA COPYRIGHT 2007 ACS on STN

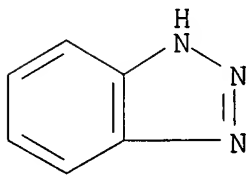
131:59541 Polyimide compositions useful for screen printing on copper  
 substrates. Moroi, Nagahiro (Central Glass Co., Ltd., Japan). Jpn.  
 Kokai Tokkyo Koho JP 11181281 A2 19990706 Heisei, 9 pp. (Japanese).  
 CODEN: JKXXAF. APPLICATION: JP 1997-351531 19971219.

AB The title compns., with thixotropic index >1.5 and specific  
 viscosity range, comprise polyimides [e.g.,  
 benzophenonetetracarboxylic dianhydride-1,3-bis(3-aminopropyl)-  
 1,1,2,2-tetramethyldisiloxane-diamino siloxane-4-(3-  
 aminophenoxy)phenyl sulfone-pyromellitic dianhydride copolymer] and  
 additives of benzotriazole derivs. [e.g., 1H-benzotriazolecarboxylic  
 acid, 1-(2,3-dihydroxypropyl)benzotriazole].

IT **60932-58-3**, 1H-Benzotriazolecarboxylic acid  
 (polyimide compns. useful for screen printing on copper  
 substrates)

RN 60932-58-3 HCA

CN 1H-Benzotriazolecarboxylic acid (9CI) (CA INDEX NAME)



D1-CO<sub>2</sub>H

IC ICM C08L079-08

ICS C08K005-3475; C09D179-08

CC 37-6 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 42, 56

IT **Inks**

(silk-screen; polyimide compns. useful for screen printing on

copper substrates)

IT **60932-58-3**, 1H-Benzotriazolecarboxylic acid 123414-03-9,  
1-(2,3-Dihydroxypropyl)benzotriazole  
(polyimide compns. useful for screen printing on copper  
substrates)

L29 ANSWER 9 OF 14 HCA COPYRIGHT 2007 ACS on STN

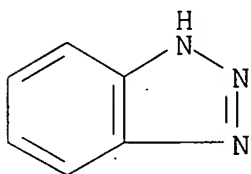
125:278836 Aqueous benzotriazole-containing **inks** for  
ball-point pens. Okumura, Shigeru; Suzuki, Susumu; Saito, Mizuho  
(Mitsubishi Pencil Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP  
08199107 A2 19960806 Heisei, 10 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1995-10551 19950126.

AB The noncorrosive **inks** contain carboxybenzotriazole (I),  
benzotriazole (II), colorants, and water and are used in ball-point  
pens having tubes contg. the **inks**, chip holders made from  
stainless steel, brass, and/or nickel silver, and superhard alloy  
balls. Thus, carbon black MA 100 8.0, glycerin 10.0, ethylene  
glycol 5.0, I 0.1, II 0.2, water 72.8%, and other additives were  
mixed for 3 h and dispersed for 5 h to give an **ink**, which  
was used in a pen having a Cr3C2 ball and a stainless steel holder  
and imparted no corrosion to the pen.

IT **60932-58-3**, 1H-Benzotriazolecarboxylic acid  
(corrosion inhibitors; noncorrosive aq. benzotriazole-contg.  
**inks** for ball-point pens)

RN 60932-58-3 HCA

CN 1H-Benzotriazolecarboxylic acid (9CI) (CA INDEX NAME)



D1-CO<sub>2</sub>H

IC ICM C09D011-18

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 55, 56

ST corrosion inhibitor carboxybenzotriazole benzotriazole aq  
**ink**; stainless steel holder aq **ink**; water based  
**ink** ball point pen

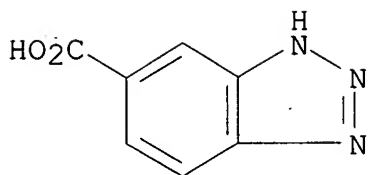
IT Carbon black, uses

(colorants, Carbon Black MA 100; noncorrosive aq.

benzotriazole-contg. **inks** for ball-point pens)

IT Corrosion inhibitors

- (noncorrosive aq. benzotriazole-contg. **inks** for ball-point pens)
- IT Pens  
(ball point, noncorrosive aq. benzotriazole-contg. **inks** for ball-point pens)
- IT **Inks**  
(water-thinned, noncorrosive aq. benzotriazole-contg. **inks** for ball-point pens)
- IT 12012-35-0, Trichromium dicarbide  
(balls; noncorrosive aq. benzotriazole-contg. **inks** for ball-point pens)
- IT 147-14-8, Chromofine Blue 4965 7518-68-5, C.I. Direct Black 19 17372-87-1, C.I. Acid Red 87  
(colorants; noncorrosive aq. benzotriazole-contg. **inks** for ball-point pens)
- IT 95-14-7, 1H-Benzotriazole **60932-58-3**, 1H-Benzotriazolecarboxylic acid  
(corrosion inhibitors; noncorrosive aq. benzotriazole-contg. **inks** for ball-point pens)
- IT 11068-66-9, Nickel silver 12597-68-1, Stainless steel, miscellaneous 12597-71-6, Brass, miscellaneous  
(holders; noncorrosive aq. benzotriazole-contg. **inks** for ball-point pens)
- L29 ANSWER 10 OF 14 HCA COPYRIGHT 2007 ACS on STN  
125:224775 Water-thinned **inks** containing carboxybenzotriazoles for ball-point pens with corrosion inhibition. Okumura, Shigeru; Suzuki, Susumu; Saito, Mizue (Mitsubishi Pencil Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 08176489 A2 19960709 Heisei, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-323270 19941226.
- AB Title **inks**, showing prevention of corrosion on ball-point pen tips, contain carboxybenzotriazoles (I), colorants, and water. The **inks** are used in ball-point pens having **ink** tubes, tip holders comprising stainless steel, brass, and/or nickel silver and hard alloy balls. Thus, an aq. black **ink** comprising MA 100 (carbon black), glycerin, ethylene glycol, styrene-acrylic acid copolymer ammonium salt, K oleate, triethanolamine, Proxel BDN (benzoisothiazolinone), and I was charged in a ball-point pen with stainless steel **ink** holder and Cr3C2-contg. hard alloy ball to show no corrosion on metals after 360 days at room temp.
- IT **23814-12-2**, 1H-Benzotriazole-5-carboxylic acid  
(aq. **inks** contg. carboxybenzotriazole corrosion inhibitors for ball-point pens)
- RN 23814-12-2 HCA
- CN 1H-Benzotriazole-5-carboxylic acid (8CI, 9CI) (CA INDEX NAME)



IC ICM C09D011-18  
 CC 42-12 (Coatings, Inks, and Related Products)  
 ST water thinned **ink** corrosion inhibitor; ball point pen aq  
**ink**; carboxybenzotriazole corrosion inhibitor aq **ink**  
 ; stainless steel **ink** holder; hard alloy ball point pen  
 IT Corrosion inhibitors  
**Inks**  
 (aq. **inks** contg. carboxybenzotriazole corrosion  
 inhibitors for ball-point pens)  
 IT Pens  
 (ball point, aq. **inks** contg. carboxybenzotriazole  
 corrosion inhibitors for ball-point pens)  
 IT **23814-12-2**, 1H-Benzotriazole-5-carboxylic acid 62972-61-6,  
 1H-Benzotriazole-4-carboxylic acid  
 (aq. **inks** contg. carboxybenzotriazole corrosion  
 inhibitors for ball-point pens)  
 IT 11068-66-9, Nickel silver 12597-68-1, Stainless steel,  
 miscellaneous 12597-71-6, Brass, miscellaneous  
 (**ink** holder; aq. **inks** contg.  
 carboxybenzotriazole corrosion inhibitors for ball-point pens)

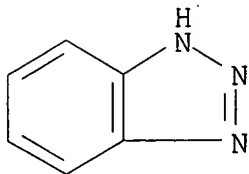
L29 ANSWER 11 OF 14 HCA COPYRIGHT 2007 ACS on STN

111:101468 Corrosion inhibition of brass and bronze in organic solvent  
 containing an unsaturated fatty acid. Notoya, Takenori (Coll. Eng.,  
 Hokkaido Univ., Sapporo, Japan). Shindo Gijutsu Kenkyu Kaishi, 26,  
 144-50 (Japanese) 1987. CODEN: SGKEBX. ISSN: 0370-985X.

AB To improve the performance and extend the service life of ball-point  
 pens by preventing the formation of **ink**-blocking corrosion  
 products, screening tests of suitable org. inhibitors as **ink**.  
 additives were conducted to decrease corrosion of Cu ball-point-pen  
 tip alloys in a simulated solvent in the presence of inhibitors.  
 Effectiveness of the inhibitors was evaluated by using visual  
 observation of immersed brass and bronze surfaces and 30-wt. loss  
 measurements in a 4:1 mixt. of benzyl alc. and oleic acid contg.  
 inhibitors under stagnant conditions at 60°s. The inhibitors  
 tested were benzotriazole, 3 benzotriazole derivs., 2  
 benzimidazoles, mercaptobenzothiazole, Ph thiourea,  
 dimercaptothiadiaazole, and dimethyldithiocarbamic acid.  
 Benzotriazole, its methy- and carboxylic-derivs., and  
 dimercaptothiadiaazole were effective for brass and bronze in

preventing dissoln. and formation of clogging corrosion products from metallic soap in the solvents.

- IT **60932-58-3**, 1H-Benzotriazolecarboxylic acid  
(corrosion inhibitor, for brass and bronze in org. solvent contg. oleic acid)  
RN 60932-58-3 HCA  
CN 1H-Benzotriazolecarboxylic acid (9CI) (CA INDEX NAME)



D1-CO<sub>2</sub>H

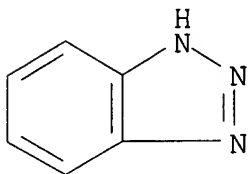
- CC 56-10 (Nonferrous Metals and Alloys)  
IT Pens  
(ball point, corrosion inhibitors in **ink** for tips of, for clogging prevention)  
IT 95-14-7, 1,2,3-Benzotriazole 103-85-5, 1-Phenyl-2-thiourea  
128-04-1, Dimethyldithiocarbamic acid sodium salt 148-79-8,  
2-(4-Thiazolyl)benzimidazole 149-30-4, 2-Mercaptobenzothiazole  
583-39-1, 2-Mercaptobenzimidazole 1072-71-5, 2,5-Dimercaptothiadiaazole  
2592-95-2, 1-Hydroxybenzotriazole  
29385-43-1, Tolyltriazole **60932-58-3**, 1H-Benzotriazolecarboxylic acid  
(corrosion inhibitor, for brass and bronze in org. solvent contg. oleic acid)

L29 ANSWER 12 OF 14 HCA COPYRIGHT 2007 ACS on STN  
110:43167 Corrosion prevention of copper alloys in ball-point pen.  
Notoya, Takenori (Fac. Eng., Hokkaido Univ., Sapporo, 060, Japan).  
Hokkaido Daigaku Kogakubu Kenkyu Hokoku (142), 1-10 (Japanese) 1988.  
CODEN: HDKKA. ISSN: 0385-602X.

- AB Detachment of surface oxide film, deposition of insol. corrosion products, heterogeneous dissoln., microcracks, and dezincification were obsd. on the **ink**-path surface of Cu alloy ball-point pen tips with poor writing performance. Test specimens (2.7 diam. and 30 mm long) of German silver, 60/40 brass, and bronze for the tips were immersed in 5 mL of a 4:1 mixt. of benzyl alc. and oleic acid contg. 5-10 mg org. corrosion inhibitors for 30 days at 60°. The anticorrosive effect of inhibitors was evaluated by corrosion wt. loss and visual observation. Benzotriazole, tolyltriazole, 2,5-dimercaptothiadiaazole, and benzotriazole

carboxylic acid were effective for all the alloys, whereas 1-hydroxybenzotriazole, 2-mercaptobenzothiazole, 1-phenyl-2-thiourea, and 2-mercaptobenzimidazole were ineffective for the alloys. 2-(4-Thiazolyl)benzimidazole was effective for bronze, but accelerated the corrosion for German silver and brass.

IT **60932-58-3**, 1H-Benzotriazolecarboxylic acid  
(corrosion inhibitor, for ball point pens)  
RN 60932-58-3 HCA  
CN 1H-Benzotriazolecarboxylic acid (9CI) (CA INDEX NAME)

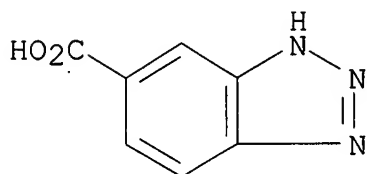


D1-CO<sub>2</sub>H

CC 56-10 (Nonferrous Metals and Alloys)  
Section cross-reference(s): 42  
ST ball pen point corrosion inhibitor; **ink** ball pen point corrosion; bronze ball pen corrosion inhibitor; brass ball pen corrosion inhibitor; nickel silver pen corrosion inhibitor  
IT Pens  
(**ink**, corrosion of ball point by, inhibitor of)  
IT 95-14-7, Benzotriazole 148-79-8, 2-(4-Thiazolyl)benzimidazole 1072-71-5; 2,5-Dimercaptothiadiaazole 29385-43-1, Tolyltriazole **60932-58-3**, 1H-Benzotriazolecarboxylic acid  
(corrosion inhibitor, for ball point pens)  
L29 ANSWER 13 OF 14 HCA COPYRIGHT 2007 ACS on STN  
103:162973 Rapid chromatographic determination of benzotriazoles in **automotive** cooling waters and cooling water formulations. Patsalides, Emilios; Robards, Kevin (Dep. Inorg. Chem., Univ. Sydney, Sydney, 2006, Australia). Journal of Chromatography, 331(1), 149-60 (English) 1985. CODEN: JOCRAM. ISSN: 0021-9673.  
AB The chromatog. behavior of benzotriazole [95-14-7] (antioxidant) and several of its derivs. on gas chromatog. (GC) fused-silica wall-coated open-tubular columns and reversed-phase liq. chromatog. (LC) columns is reported. Although severe tailing and irreversible retention were obsd. on the polar GC columns, considerably improved behavior was obtained on nonpolar OV-101 and moderate polarity BP-10 columns, with detection limits (flame ionization detection) in the n-g range. Of the reversed-phase LC columns, Spherisorb 5 C8 was the most suitable, producing little or no tailing. Detection limits

on this column with UV detection at 254 nm were also in the n-g range. An LC method for detg. benzotriazoles in both **automotive** cooling waters and aq. coolants involving only diln. of the sample prior to anal. is described.

IT **23814-12-2**  
(corrosion inhibitors, of **automotive** coolants,  
chromatog. of)  
RN 23814-12-2 HCA  
CN 1H-Benzotriazole-5-carboxylic acid (8CI, 9CI) (CA INDEX NAME)

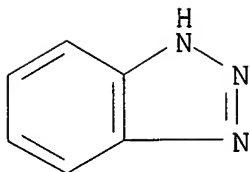


CC 51-8 (Fossil Fuels, Derivatives, and Related Products)  
Section cross-reference(s): 80  
ST **automobile** antifreeze benzotriazole chromatog  
IT 95-14-7  
(corrosion inhibitors, in **automotive** coolants,  
chromatog. of)  
IT 94-97-3 1548-67-0 2338-12-7 **23814-12-2** 29385-43-1  
34374-67-9  
(corrosion inhibitors, of **automotive** coolants,  
chromatog. of)

L29 ANSWER 14 OF 14 HCA COPYRIGHT 2007 ACS on STN  
92:167513 Corrosion inhibiting composition for ferrous metals.  
Scheurman, Clarence, III (Zimmite Corp., USA). U.S. US 4184991  
19800122, 5 pp. (English). CODEN: USXXAM. APPLICATION: US  
1978-886146 19780313.

AB A corrosion inhibition system for ferrous alloys consists of a mixt. contg. benzotriazole, tolyltriazole, or a substituted benzotriazole in an aq. **vehicle**, and a water sol. polymer of lower alkyl esters of org. acids such as acrylic and methacrylic acids. The benzotriazole concn. is 2-20 ppm, and the ratio of the org. compd. and the polymer is 0.5:1 to 3:1 by wt. Thus, the corrosion rate of a mild steel coupon was decreased from 28.1 to 4.0 mil/yr by adding 5 ppm tolyltriazole to a soln. of 2 ppm polymethacrylate.

IT **60932-58-3**  
(ferrous metal corrosion inhibitor contg.)  
RN 60932-58-3 HCA  
CN 1H-Benzotriazolecarboxylic acid (9CI) (CA INDEX NAME)



D1-CO<sub>2</sub>H

IC C08K005-29  
INCL 260029600MN  
CC 55-10 (Ferrous Metals and Alloys)  
IT 25087-26-7 29385-43-1 **60932-58-3** 73451-04-4  
(ferrous metal corrosion inhibitor contg.)

=> D L30 1-29 TI

L30 ANSWER 1 OF 9 HCA COPYRIGHT 2007 ACS on STN  
TI Perfluoropolyether benzotriazole compounds for anti-soiling coatings

L30 ANSWER 2 OF 9 HCA COPYRIGHT 2007 ACS on STN  
TI Silver halide photographic material containing nucleating agent and nucleation accelerator and its processing method

L30 ANSWER 3 OF 9 HCA COPYRIGHT 2007 ACS on STN  
TI Fluorine-containing polyoxyalkylene and its use in organic material and photographic material

L30 ANSWER 4 OF 9 HCA COPYRIGHT 2007 ACS on STN  
TI Silver halide photographic material giving high contrast image and processing thereof

L30 ANSWER 5 OF 9 HCA COPYRIGHT 2007 ACS on STN  
TI Method for rapid photographic processing with maintained color balance using diffusible photochemical compound

L30 ANSWER 6 OF 9 HCA COPYRIGHT 2007 ACS on STN  
TI Preparation of positive-working photoresist

L30 ANSWER 7 OF 9 HCA COPYRIGHT 2007 ACS on STN  
TI Synthesis and structure of ferrocenylalkyl onium derivatives of nitrogen-containing heterocyclic compounds



L30 ANSWER 8 OF 9 HCA COPYRIGHT 2007 ACS on STN  
TI Method for processing silver halide photographic material

L30 ANSWER 9 OF 9 HCA COPYRIGHT 2007 ACS on STN  
TI Polyoxyalkylene polyamine triazole complexes

=> D L31 1-64 TI

L31 ANSWER 1 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Efficient Microwave Access to Polysubstituted Amidines from Imidoylbenzotriazoles

L31 ANSWER 2 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI A convenient access to 1-substituted 2-aziny-1-ethanones via acylation of alkylated azines with N-acylbenzotriazoles

L31 ANSWER 3 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI A convenient access to 1-substituted 2-aziny-1-ethanones via acylation of alkylated azines with N-acylbenzotriazoles

L31 ANSWER 4 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Manufacture of unsaturated fatty acids-modified insulin for treating diabetes

L31 ANSWER 5 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI 2-(1H-Benzo-1,2,3-triazol-1-yl)-4,4-dimethyl-3-oxo-N-phenylpentanethioamide monohydrate

L31 ANSWER 6 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Facile syntheses of 2,2-dimethyl-6-(2-oxoalkyl)-1,3-dioxin-4-ones and the Corresponding 6-substituted 4-hydroxy-2-pyrones

L31 ANSWER 7 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Highly enantioselective catalytic conjugate addition of N-heterocycles to  $\alpha,\beta$ -unsaturated ketones and imides

L31 ANSWER 8 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Process for preparation of oxetan-2-ones

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TI Novel syntheses of pyrido[1,2-a]pyrimidin-2-ones, 2H-quinolizin-2-ones, pyrido[1,2-a]quinolin-3-ones, and thiazolo[3,2-a]pyrimidin-7-ones

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TI Preparation of  $\beta$ -keto esters and  $\beta$ -diketones by

C-acylation/deacetylation of acetoacetic esters and acetonyl ketones with 1-acylbenzotriazoles

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TI The Synthesis of  $\alpha$ -Benzotriazolyl Ketones from Acid Halides
- L31 ANSWER 12 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI The preparation of N-acylbenzotriazoles from aldehydes
- L31 ANSWER 13 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI General and Efficient Insertion of Carbons Carrying Benzotriazole
- L31 ANSWER 14 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Efficient conversion of carboxylic acids into N-acylbenzotriazoles
- L31 ANSWER 15 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Pharmaceutical compositions and uses of GLP-1 mimetics for the treatment of diabetes
- L31 ANSWER 16 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Lipodepsipeptide antibiotics and methods of preparation
- L31 ANSWER 17 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI [ $^{125}\text{I}$ ], [ $^{127}\text{I}$ ]-and [ $^{14}\text{C}$ ]-labelling of the GLP-1-(7-37) derivative NN2211
- L31 ANSWER 18 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Samarium diiodide promoted formation of 1,2-diketones and 1-acylamido-2-substituted benzimidazoles from N-acylbenzotriazoles
- L31 ANSWER 19 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI The synthesis of 2,3,5-trisubstituted phenols
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TI Regiocontrol in the  $\alpha,\alpha$ -dialkylation of ketones
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TI Solid-phase preparation of amides using N-acylbenzotriazoles
- L31 ANSWER 22 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Formation of 1,2-diketones by samarium diiodide promoted reaction of N-acylbenzotriazoles
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TI 1,2- vs 1,4-Addition of Acylbenzotriazoles to  $\alpha,\beta$ -Unsaturated Aldehydes and Ketones. A Novel Route to 3-Alkyl-4,6-diaryl-3,4-dihydropyran-2-ones

- L31 ANSWER 24 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Regiospecific Synthesis of 4-(2-Oxoalkyl)pyridines
- L31 ANSWER 25 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Preparation of lipophilic human glucagon-like peptide-1 derivatives with protracted action profiles
- L31 ANSWER 26 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI One-Carbon Homologation of Carboxylic Acids via BtCH<sub>2</sub>TMS: A Safe Alternative to the Arndt-Eistert Reaction
- L31 ANSWER 27 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Preparation of lipophilic human glucagon-like peptide-1 derivatives with protracted action profiles
- L31 ANSWER 28 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI The X-ray structures of HOBt-based immonium-type coupling reagents and the rearrangement of benzotriazolyl esters of N $\alpha$ -protected amino acids or peptides: N- vs. O-substituted forms
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TI From Amides to Amidines: Preparations of Imidoylbenzotriazoles and Arylaminoheterocycles
- L31 ANSWER 30 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI BtCH<sub>2</sub>TMS-Assisted Homologation of Carboxylic Acids: A Safe Alternative to the Arndt-Eistert Reaction
- L31 ANSWER 31 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Polycyclic Heteroaromatics from Reactions of Acylbenzotriazoles with Aryl Isocyanates
- L31 ANSWER 32 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Method for acylating peptides and novel acylating agents
- L31 ANSWER 33 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Synthesis of  $\beta$ -Dicarbonyl Compounds Using 1-Acylbenzotriazoles as Regioselective C-Acylating Reagents
- L31 ANSWER 34 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Preparation of GLP-1 analogs for treatment of obesity and non-insulin dependent diabetes mellitus
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TI GLP-1 derivatives with helix-content exceeding 25 %, forming partially structured micellar-like aggregates
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- TI Synthesis of enantiomerically pure  $\beta$ -lactones by the tandem aldol-lactonization. A highly efficient access to (3S,4S)-3-hexyl-4-[(2S)-2-hydroxytridecyl]oxetan-2-one, the key intermediate for the enzyme inhibitors tetrahydrolipstatin and tetrahydroesterastin
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TI Preparation of 4-(hydroxyalkyl)oxetan-2-ones.
- L31 ANSWER 38 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Novel Synthesis of  $\alpha$ -Benzotriazolyl-substituted Ketones
- L31 ANSWER 39 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Selective side chain acylation of lysine-containing peptides with activated amides
- L31 ANSWER 40 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI A Novel Transformation of Esters to Alkynes with 1-Substituted Benzotriazoles
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TI Syntheses of  $\beta$ -lactones. Part 6. One-step synthesis of  $\beta$ -lactones by aldolization of ketones or aldehydes with 1-acylbenzotriazoles
- L31 ANSWER 42 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Cyclic hexapeptides having antibiotic activity
- L31 ANSWER 43 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Preparation of benzotriazole derivatives as intermediates for yellow couplers
- L31 ANSWER 44 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI N-( $\alpha$ -Ethoxyallyl)benzotriazole: A Novel Propenoyl Anion Synthon Route to Vinyl Ketones
- L31 ANSWER 45 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI Synthesis and fungicidal activity of some silicon-containing azole compounds
- L31 ANSWER 46 OF 64 HCA COPYRIGHT 2007 ACS on STN  
TI The reaction of a benzotriazole substituted vinamidinium salt with Grignard reagents
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TI The reactions of benzotriazole with unsaturated aldehydes and ketones in the presence or absence of amines
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- TI Mannich reactions of carbonyl compounds and enamines with benzotriazole as the NH component
- L31 ANSWER 49 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI The effect of molecular structure of nitrogen-containing heterocyclic compounds on their wear properties
- L31 ANSWER 50 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI Pharmaceutical composition against *Pneumocystis carinii*
- L31 ANSWER 51 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI N-(1-benzotriazol-1-ylalkyl)amides, versatile  $\alpha$ -amidoalkylation reagents. 1.  $\alpha$ -Amidoalkylation of CH acids
- L31 ANSWER 52 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI The chemistry of N-substituted benzotriazoles. Part 22. Transformations of 1-(trimethylsilylmethyl)benzotriazole
- L31 ANSWER 53 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI Manufacture of corrosion inhibitors for metals
- L31 ANSWER 54 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI Rearrangement of unsaturated acylhydroxybenzotriazoles
- L31 ANSWER 55 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI Organic rust inhibitors
- L31 ANSWER 56 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI Heteropentalenes. The oxidation of pyrazolo[1,2-a]benzotriazoles
- L31 ANSWER 57 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI Benzotriazoles and their use as drugs
- L31 ANSWER 58 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI Mechanism of the action of N-acylbenzotriazoles as oil-soluble corrosion inhibitors
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- TI Benzotriazol derivatives
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- TI Insecticidal, acaricidal, and nematocidal oxime carbamates
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- TI Lubricating oils containing oil-soluble benzotriazole derivatives
- L31 ANSWER 62 OF 64 HCA COPYRIGHT 2007 ACS on STN
- TI Synthesis and antiinflammatory activity of aliphatically substituted

benzotriazoles

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TI N-Acylbenzotriazoles as corrosion inhibitors

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